

REMARKS / ARGUMENTS

The present application includes pending claims 1-36. Claims 2, 11, 20 and 29 have been amended to clarify the claim language. Claims 2, 11, 20 and 29 are objected to because of informalities to the claim language.

Claims 19-36 are rejected under 35 USC 101 for allegedly being directed to non-statutory subject matter.

Claims 1-7, 9-16, 18-25, 27-34, 36 are rejected under 35 USC 103(a) as allegedly being unpatentable over Ayyagari et al. (US Pub. No. 2001/0024434, hereinafter Ayyagari), and further in view of Singhal et al. (US Pub. No. 2002/0165990, hereinafter Singhal).

Claims 8, 17, 26, 35 are rejected under 35 USC 103(a) as allegedly being unpatentable over Ayyagari and Singhal as applied to claims 1, 10, 19 and 28, and further in view of Matta et al. (US Pub. No. 2003/0142651, hereinafter Matta).

The Applicant traverses the rejections and respectfully submits that the claims define patentable subject matter.

I. Objection to Claims 2, 11, 20 and 29

Claims 2, 11, 20 and 29 are objected to because of informalities to the claim language "plurality access devices". The Applicant has amended the claim language to

now read “plurality of access devices”. The Applicant respectfully requests that the objection to claims 2, 11, 20 and 29 be withdrawn.

II. Rejection Under 35 U.S.C. § 101

Claims 19-36 are rejected under 35 USC 101 for being allegedly directed to non-statutory subject matter, such as an abstract idea not tied to a technological art, environment or machine which would result in producing a useful and tangible result to form the basis of statutory subject matter under 35 USC 101. Specifically, the Examiner alleges the following:

“In this case, the claimed limitations of a receiver and controller may be construed as software per se. In Applicants Specification page 21, paragraph 60, it says that **components of a switch may include suitable circuitry and/or software**. Paragraph 62, mentions the receiver and controller components. Since the components can be implemented **solely using software**, the claims are rejected as being non-statutory subject matter. “

See the Office Action at page 2. The Applicant respectfully disagrees and points out that, claim 19 clearly recites “at least one **receiver** adapted to receive... first messaging protocol message ...”. In this regard, **the receiver 406, as shown in Fig. 4 of the specification, is at least partially a physical layer device, that performs a useful function of at least receiving “a first messaging protocol message”** for QoS determination of the first switch and first access point. In this regard, the Examiner’s allegation that “the components can be implemented **solely using software**” is inconsistent with the claim language of claims 19 and 28. The Applicant maintains that

claims 19-36 are directed to statutory subject matter, and respectfully requests that the rejection to claims 19-36 under 35 USC 101 be withdrawn.

III. Rejection Under 35 U.S.C. § 103

In order for a prima facie case of obviousness to be established, the Manual of Patent Examining Procedure ("MPEP") states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a prima facie case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a

prima facie case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

A. The Proposed Combination of Ayyagari and Singhal Does Not Render Claims 1-7, 9-16, 18-25, 27-34 and 36 Unpatentable

The Applicant turns to the rejection of claims 1-7, 9-16, 18-25, 27-34 and 36 by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Ayyagari in view of Singhal.

A(1). Rejection of Independent Claims 1, 10, 19 and 28

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Ayyagari and Singhal does not disclose or suggest at least the limitation of "receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information," as recited in the Applicant's claim 1.

The Examiner states the following in the Office Action:

As per claims 1,10,19,28, Ayyagari discloses a method for providing network management in a local area network, the method comprising:

"receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information (see paragraph 48, showing how a router i. e. network device, receives QoS request from access pointer [200];"

See the Office Action at page 3. The Examiner relies for support on the following citation by Ayyagari which states:

"The laptop computer 215, which is one of the wireless devices 210, 215 or 220, requests access to a network to communicate, with a specified QoS specifying the required bandwidth, time constraints and the like, with a receiving node 230. In response, **the access point 200 sends a message requesting QoS to a router 235. The router 235 manages packet flow through a subnet 240 to allow the requested communication access to the receiving node 230.**"

See Ayyagari at ¶0048 page 3. The Examiner equates the router 235 to the claimed "network device", and equates the access point 200 sending a message request QoS to a router 235 to be the same as the claimed "receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information".

The Applicant respectfully disagrees and initially points out that Ayyagari, at Fig. 2, discloses that the router 235 (i.e., the alleged network device) is part of the Subnet Bandwidth Manager (SBM 240). Ayyagari also discloses that the Subnet Bandwidth Manager (SBM 240) is combined with the AP 200 to track allocation of wireless bandwidth. In other words, Ayyagari discloses that the SBM is an integrated functional part of the access point 200, not to be separated. Specifically, the Examiner is referred to the following citation by Ayyagari which states:

"The invention **combines a subnet bandwidth manager ("SBM") at an access point ("AP")** to track allocations of wireless bandwidth."

See Ayyagari at the abstract (emphasis added). To further substantiate the argument that the SBM 204 is functionally integrated with the AP 200, the Examiner is further referred to the following citation by Ayyagari which states:

“...Typically in a wireless network **the access point (AP) or a base station hosts a subnet bandwidth manager (SBM) functionality** for managing resources across the shared wireless media. **Typically the SBM performs the reservation and querying of nodes.** In an embodiment of the invention **the starting node is also the access point** for a wireless link into a network.”

See Ayyagari at ¶0057 (emphasis added). Ayyagari in the above citation clearly discloses that the AP 200 host a subnet SBM 204 functionality, and that the AP 200 is a starting node. Since the router 235 (i.e., the alleged network device) is a functional part of the SBM 204, which in turn, is a part of the AP 200, **subsequently, the router 235 (i.e., the alleged network device) is also part of the same starting node within the AP 200**. In this regard, the Examiner's allegation that the router 235 is the alleged network device would be to equate the network device to be the same as the AP 200 itself, which contradicts to the disclosure of Ayyagari.

Therefore, based on the foregoing rationale, the Applicant maintains that Ayyagari at least does not disclose or suggest the limitation of “**receiving at a network device, from one or both of a first access point and/or a first switch, a first messaging protocol message containing quality of service (QoS) information,**” as recited in the Applicant's claim 1. Singhal does not overcome the above deficiencies of Ayyagari.

Accordingly, based on Ayyagari's lack of disclosure of a network device receiving a first message protocol message from a first access point, subsequently the applicant submits that Ayyagari also does not disclose or suggest the remaining limitations of

“responsive to said first messaging protocol message, determining at least a minimum QoS level for operation of one or more of said first switch, said first access point, a second access point, and/or a second switch; and distributing by said network device, QoS information corresponding to said determined at least a minimum QoS level to one or more of said first switch, said first access point, said second access point and/or said second switch, using a second messaging protocol message, wherein said second messaging protocol message is different from said first messaging protocol message,” as recited in claim 1 by the Applicant. Likewise Singhal also does not overcome Ayyagari’s above deficiencies.

In addition, at page 3 of the Office Action, the Examiner concedes the following:

“Although the system disclosed by Ayyagari shows substantial features of the claimed invention (discussed above), **it fails to disclose that the first (second) messaging protocol is different from the first messaging protocol.**”

See the Office Action at page 3. The Examiner turns to Singhal to disclose the above deficiencies of Ayyagari and states the following:

“Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Ayyagari, as evidenced by Singhal...”

Given the teaching of Singhal, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Ayyagari by employing a network device that can provide a first messaging protocol and a second messaging protocol where the first wireless messaging protocol is different than the wired second messaging protocol, such as disclosed by Singhal, in order to communicate quality of service information to wireless network and wired networks from a single device. In considering the second messaging protocol being different than

the first messaging protocol, the router and access point disclosed in Ayyagari would be a single device with both wireless access point and wired router capabilities... Therefore, if a wireless message was being sent from a wireless node to the network device, and the network device passes messages to a wired node, the second messaging protocol would be different than the first."

See the Office Action at page 4. The Examiner seems to allege that Singhal's disclosure of both a wireless network and wired network would provide obviousness evidence to modify Ayyagari to use a **different** second messaging protocol message for both types of networks (i.e., wired and wireless network). The Applicant respectfully disagrees and points out that Singhal in the entire reference does not even disclose or suggest using any messaging protocol message at all. In this regard, the Applicant maintains that there is no support to the Examiner's allegation that combining Singhal with Ayyagari would show obviousness to modify Ayyagari to use two different messaging protocol messages in Singhal.

Furthermore, even assuming for the sake of argument that Ayyagari can be modified to use two different messaging protocol messages, the Examiner's argument is still moot since Ayyagari discloses that the alleged network device (i.e., the router 235) and the AP 200 are the same node. In other words, irrespective of how many different types of messaging protocol messages are used, the messaging protocol messages would never have left the node of the AP 200.

Consequently, the Applicant maintains that the combination of Ayyagari's and Singhal does not establish a prima facie case of obviousness under 35 U.S.C. § 103(a) to reject claim 1, and therefore claim 1 should be allowable. The Applicant respectfully

requests that the rejection of independent claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Claims 10, 19 and 28 are similar in many respects to independent claim 1, and therefore, claims 10, 19 and 28 are also allowable for the same rationale as stated above with regard to claim 1. The Applicant respectfully requests that the rejection of claims 10, 19 and 28 be also withdrawn.

Furthermore, The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the independent claims 1, 10, 19 and 28 should such a need arise.

A(2). Dependent Claims 2-7, 9, 11-16, 18, 20-25, 27, 29-34 and 36

Based on at least the foregoing, the Applicant believes the rejection of the independent claims 1, 10, 19 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Yin further in view of Cheng has been overcome and should be allowable. Claims 2-7, 9, 11-16, 18, 20-25, 27, 29-34 and 36 depend directly or indirectly from the independent claims 1, 10, 19 and 28, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 2-7, 9, 11-16, 18, 20-25, 27, 29-34 and 36 should such a need arise.

B. The Proposed Combination of Ayyagari, Singhal and Matta Does Not Render Claims 8, 17, 26 and 35 Unpatentable

Based on at least the foregoing, the Applicant believes the rejection of the independent claims 1, 10, 19 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Yin further in view of Cheng has been overcome and should be allowable. Claims 8, 17, 26 and 35 depend directly or indirectly from the independent claims 1, 10, 19 and 28, and are, consequently, also respectfully submitted to be allowable and requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of dependent claims 8, 17, 26 and 35 should such a need arise.

CONCLUSION

Based on at least the foregoing, the Applicant believes that all pending claims 1-36 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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